USACE IT/IM Migration Strategy

Decision Briefing

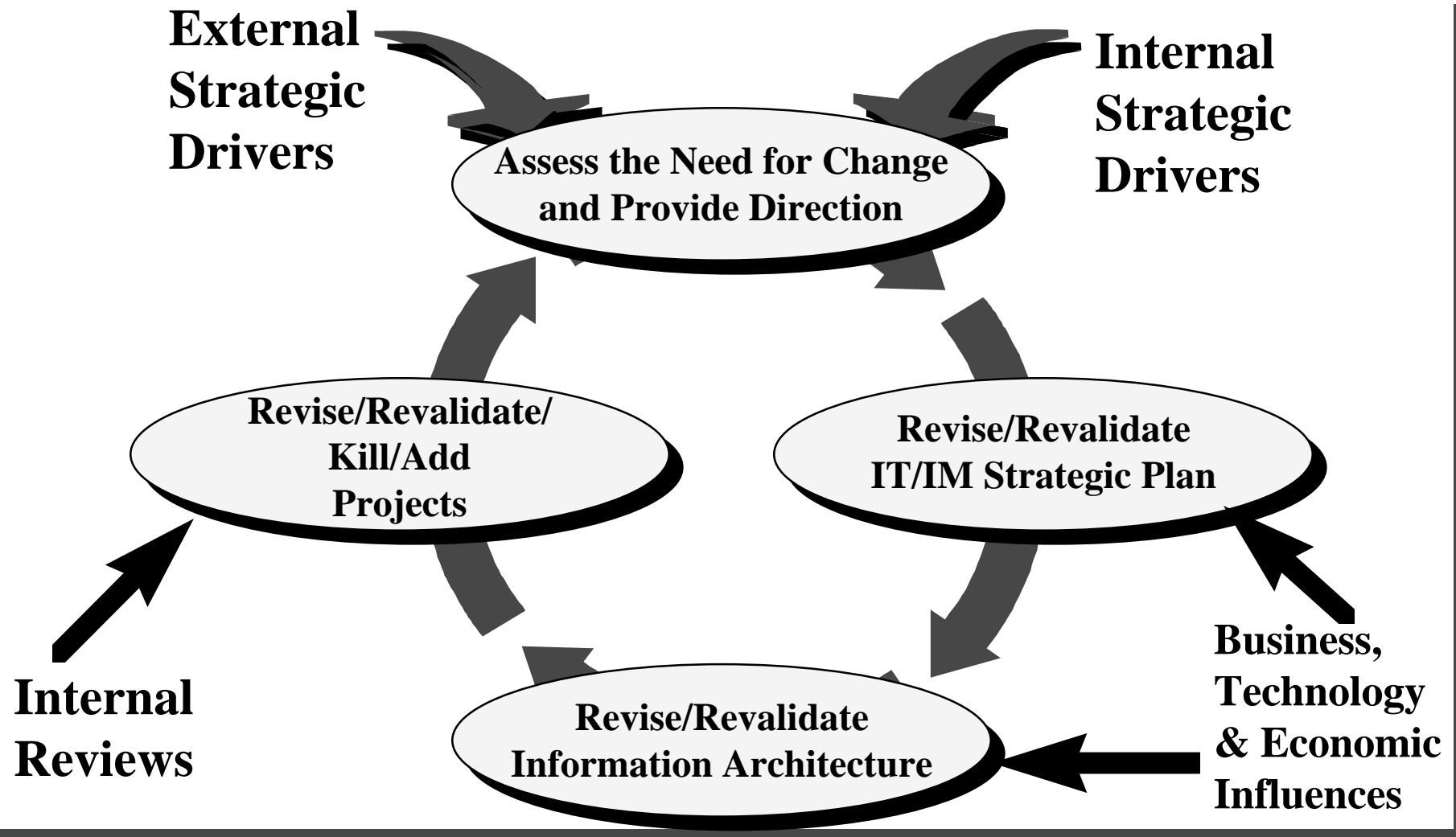Board of Directors

5 February 1998

Agenda

- Mission

- IT/IM Strategic Planning Process

- Architecture 2000+ Overview

- How IT/IM Strategy supports Campaign Plan

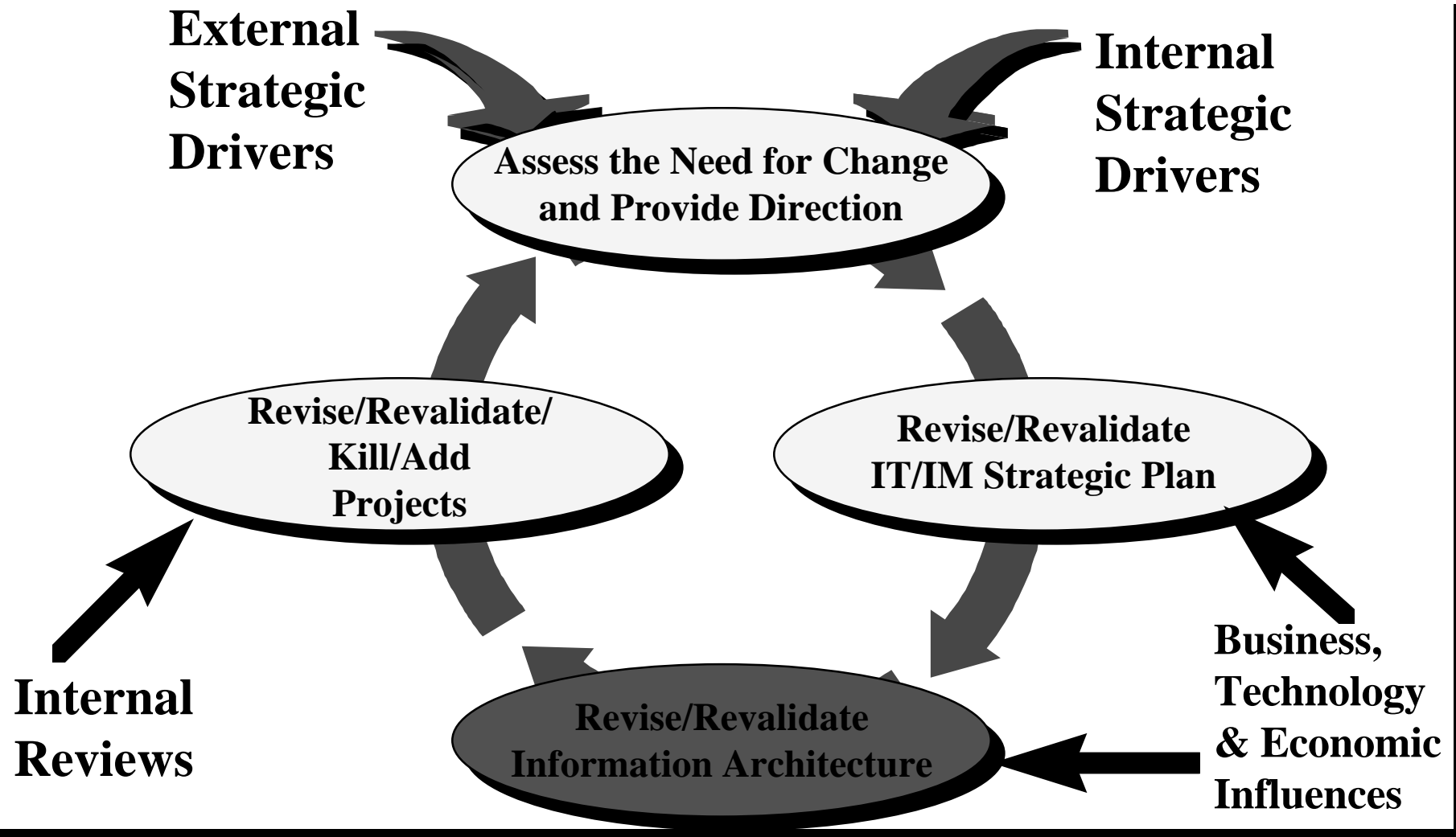- Corporate IT Initiatives for CY 1998

- Conclusion
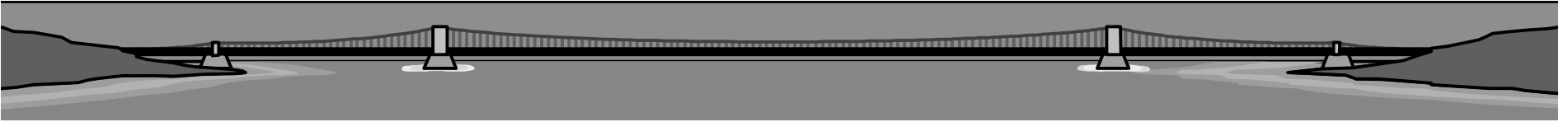
IT/IM Environment Mission Statement

The IM mission is to provide USACE employees and contractors with the capability to readily acquire, store, share, use, disseminate, and protect the information needed to successfully accomplish their jobs; and to acquire and sustain an IT environment that supports USACE business strategies and goals while improving mission performance and customer satisfaction.

IT/IM Strategic Planning Process

External
Strategic
Drivers

Internal
Strategic
Drivers

**Assess the Need for Change
and Provide Direction**

**Revise/Revalidate/
Kill/Add
Projects**

**Revise/Revalidate
IT/IM Strategic Plan**

Internal
Reviews

**Revise/Revalidate
Information Architecture**

Business,
Technology
& Economic
Influences

IT/IM Strategic Planning Process

External Strategic Drivers

Internal Strategic Drivers

Assess the Need for Change and Provide Direction

Revise/Revalidate/ Kill/Add Projects

Revise/Revalidate IT/IM Strategic Plan

Internal Reviews

Revise/Revalidate Information Architecture
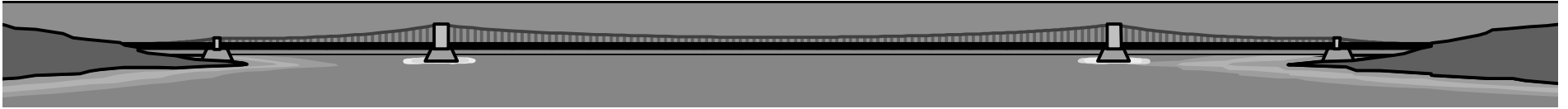
Business, Technology & Economic Influences

ARCHITECTURE 2000+

INFORMATION BRIEFING
TO
BOARD OF DIRECTORS

WEB SITE for A2k+:
http://www.usace.army.mil/im/ceimp/arch.html#PH2

STRATEGIC VISION

Revolutionize Effectiveness

Seek Growth Opportunities

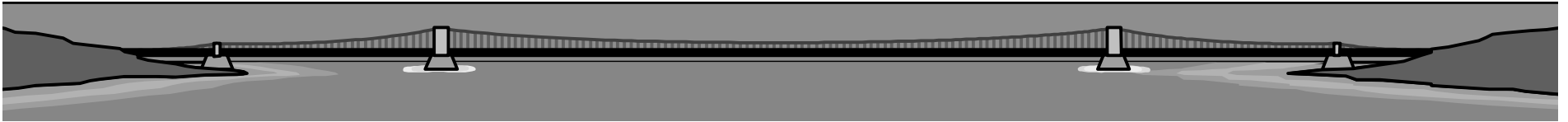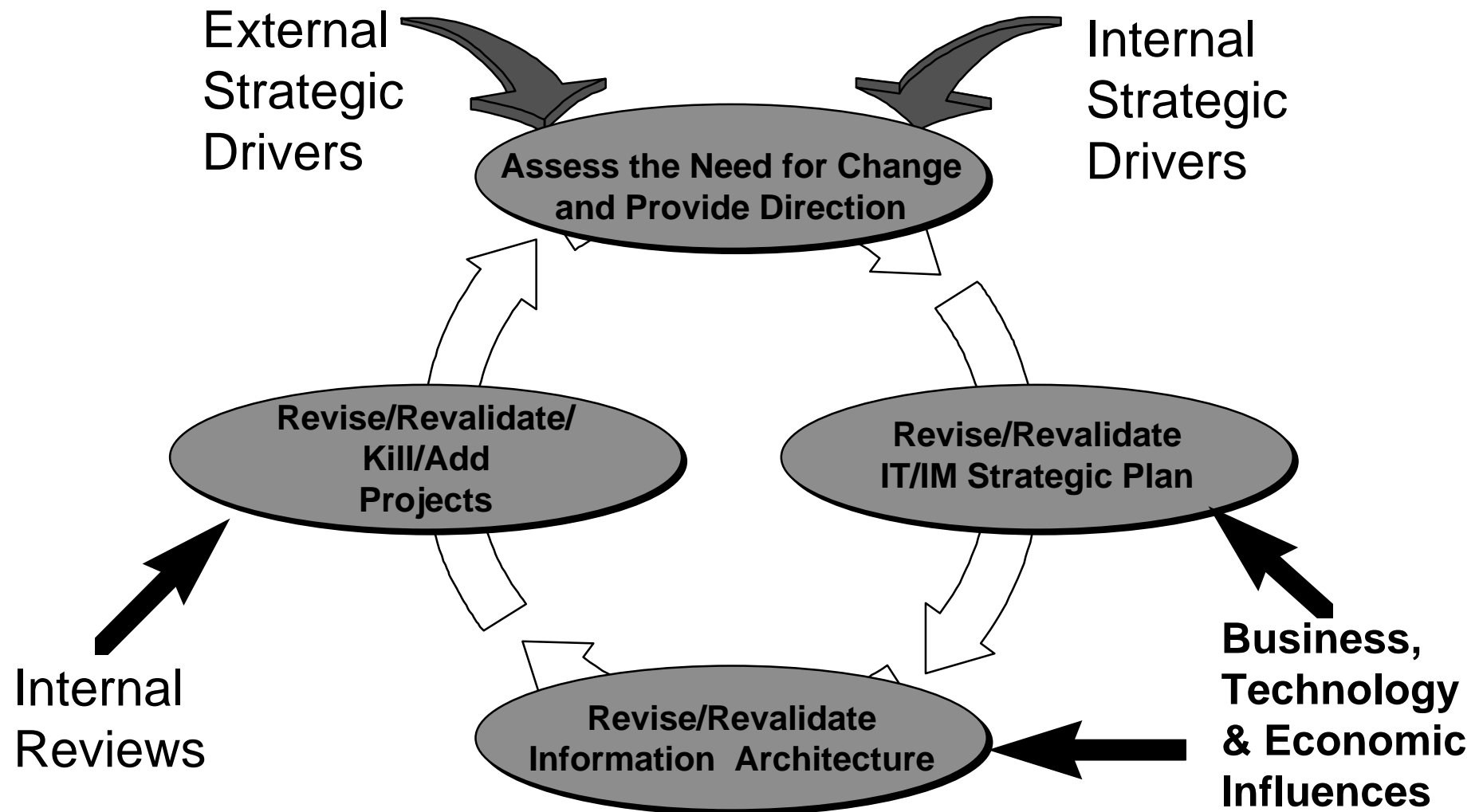Invest in People
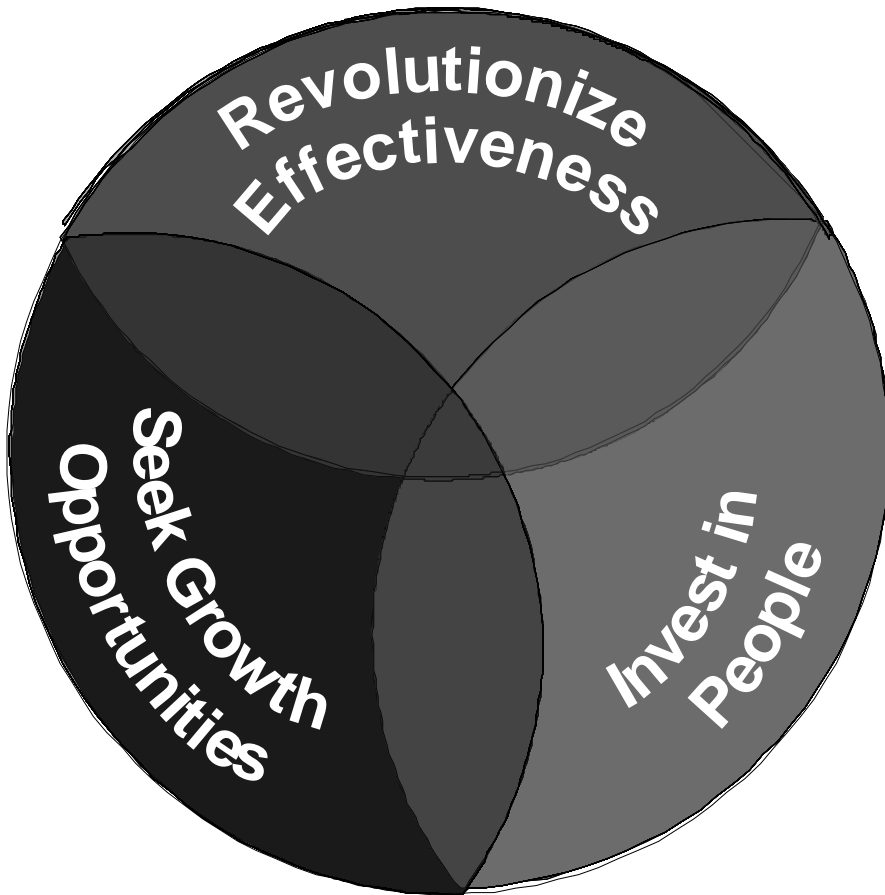
- Sets the Direction for Organizational Change

- Establishes the Top Level Guidance for IT/IM Planning

STRATEGIC PLANNING PROCESS

External
Strategic
Drivers

Internal
Strategic
Drivers

**Assess the Need for Change
and Provide Direction**

**Revise/Revalidate/
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**Revise/Revalidate
IT/IM Strategic Plan**

**Revise/Revalidate
Information Architecture**

Internal
Reviews

**Business,
Technology
& Economic
Influences**

# DEFINITION OF USACE INFORMATION ARCHITECTURE

Definition: The USACE Information Architecture is an integrated framework for evolving information resources to achieve our strategic goals.

This integrated framework consists of:

■ Results descriptions

■ Business, information, applications and technology components

■ Component interrelationships

■ Principles and guidelines governing component design

■ Products and services to build components

THE USACE FUTURE IT ENVIRONMENT

**The Ability for <u>Authorized</u> Users
to <u>Transparently</u>
Create, Retrieve, Update, Delete, Exchange and Share
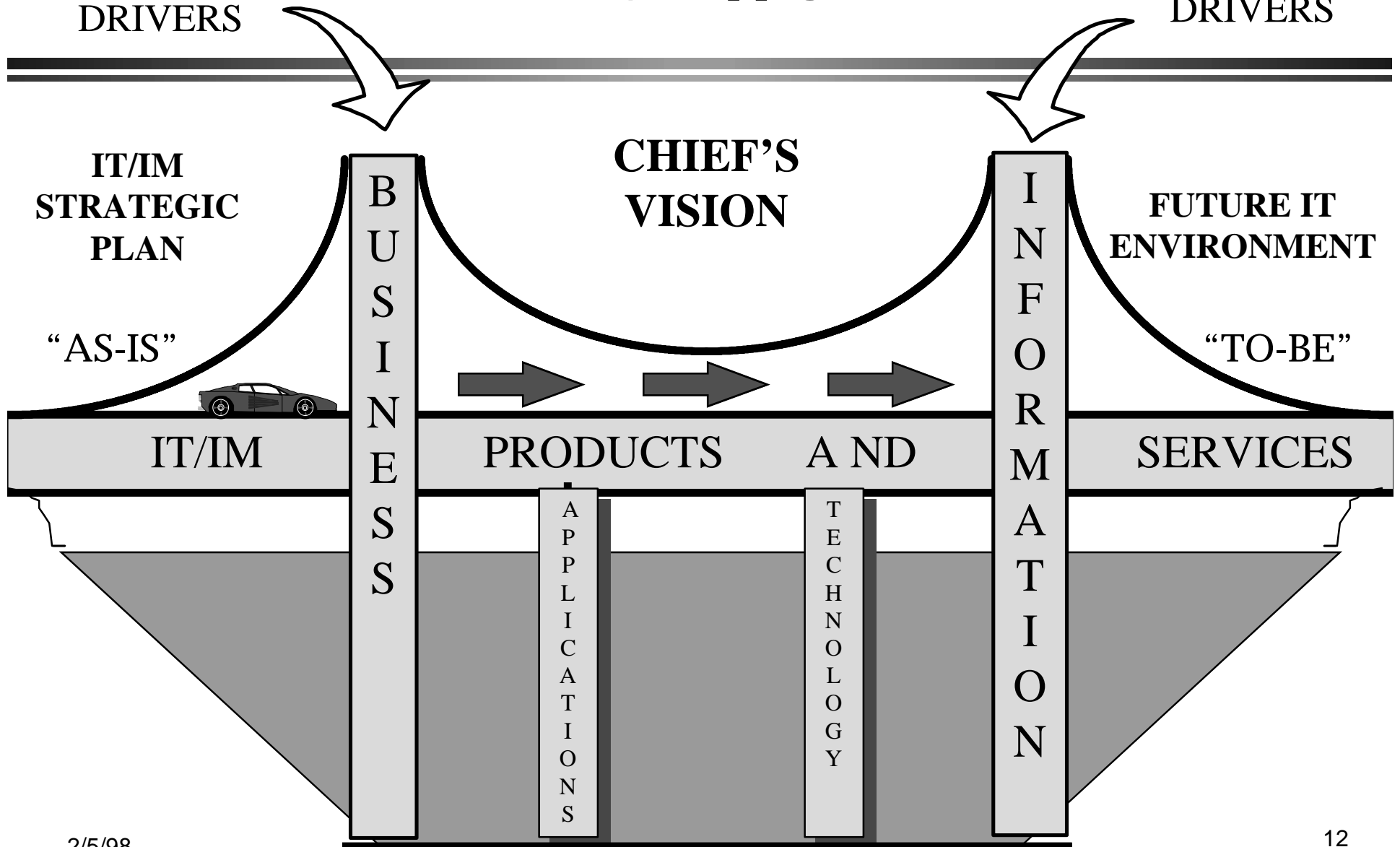Multi-Media Information Anywhere, Anytime**

EXTERNAL CONSTITUENTS

CIVIL WORKS

USACE

DPWs

TRADOC/ FORSCOM

DEPLOYED FORCES

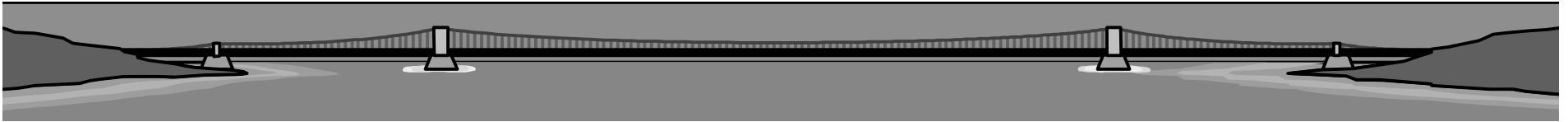2/5/98

10
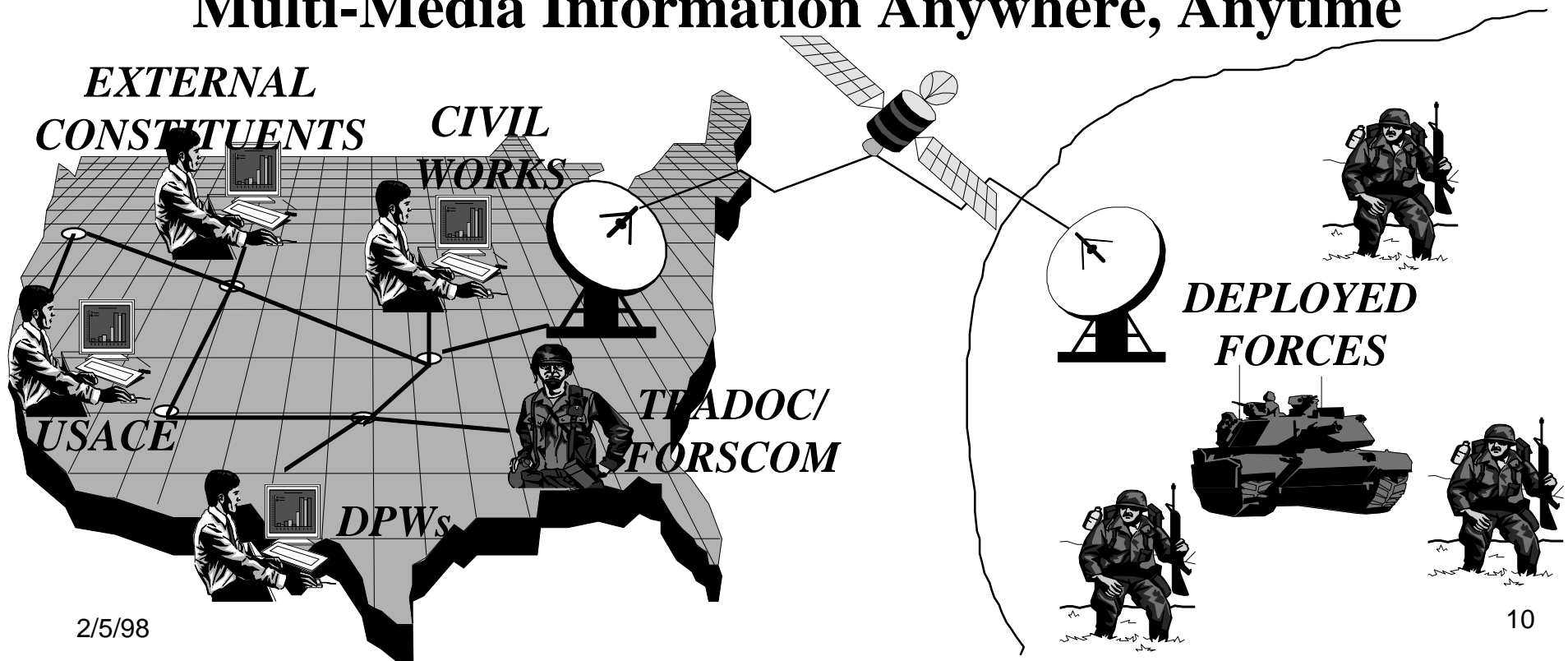
CHARACTERISTICS OF THE FUTURE IT ENVIRONMENT

■ **Dynamic Environment and Moving Target**

■ **Information-Centric**

　» **Web-Based**

　» **Single Authoritative Source of Data, Replicated as Needed**

■ **Mobile Users**

■ **Mix of "Pushing" and "Pulling" Information**

■ **Open, Flexible Applications and Technologies**

■ **Global Reach**

■ **Secure**

■ **Multi-Media Interface (Voice, Touch, Sight, and Sound)**

■ **Agile Network and Infrastructure**

■ **Technology and Application "Commodities"**

ARCHITECTURE FRAMEWORK

EXTERNAL STRATEGIC DRIVERS

INTERNAL STRATEGIC DRIVERS

IT/IM STRATEGIC PLAN

CHIEF'S VISION

FUTURE IT ENVIRONMENT

"AS-IS"

"TO-BE"

BUSINESS

INFORMATION

IT/IM   PRODUCTS   A ND   SERVICES

APPLICATIONS

TECHNOLOGY

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IT/IM STRATEGIC PLAN

IT/IM GOALS → IT/IM OBJECTIVES → IT/IM STRATEGIES

Desired Business Benefits

Performance Measurements

Action Plans
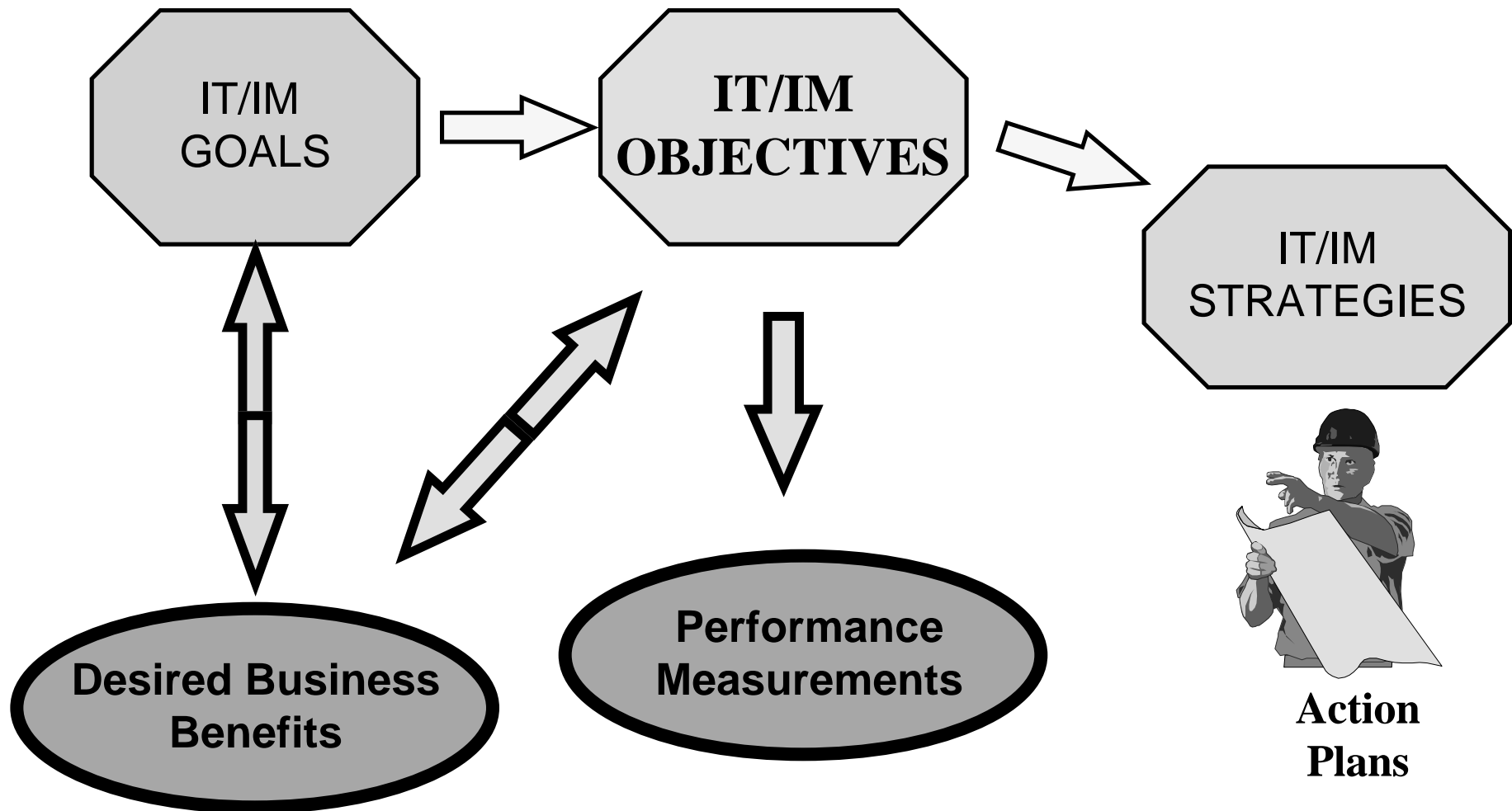
IT/IM Migration Strategy Goal (6)

- Transparently Share Information
- Promote a Common Working Environment
- Protect Information
- Satisfy Internal/External Customer Information Needs
- Be Cost Effective
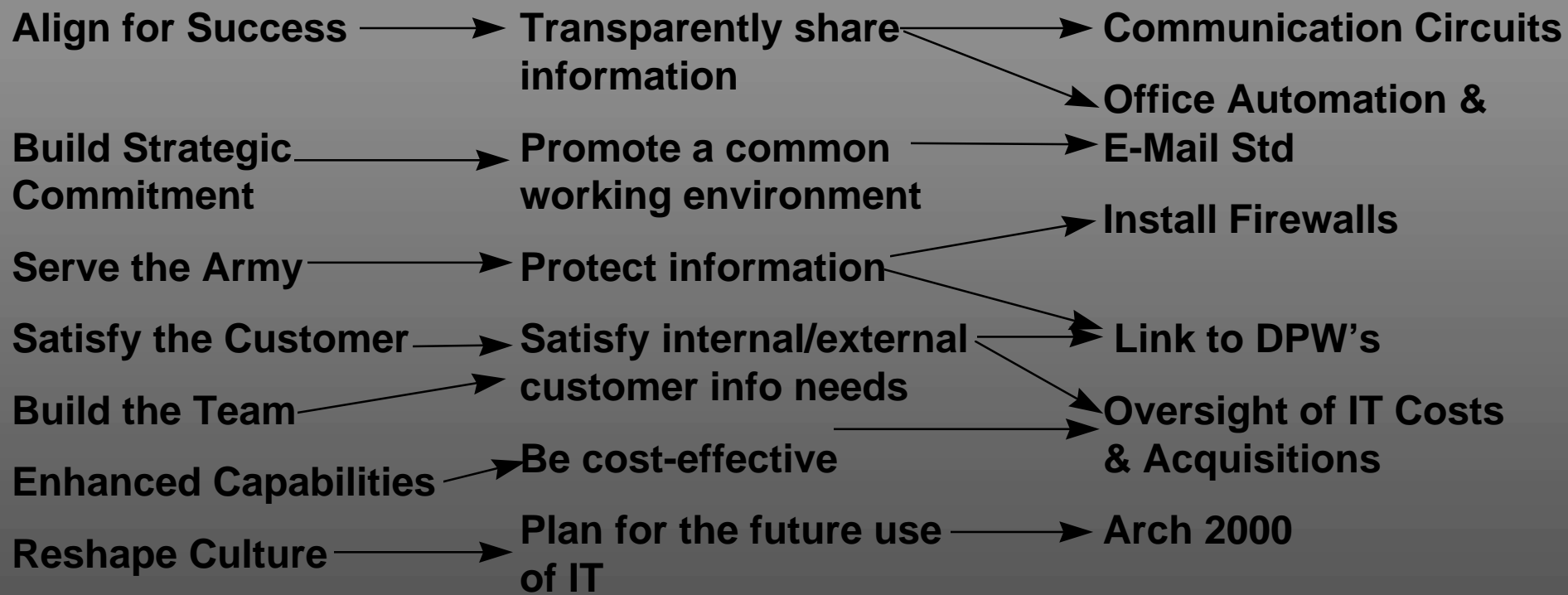- Plan for the Future Use of IT

Corps Plus ⟷ Action Plans

Corps Plus Strategy (7)	IT/IM Strategic Goals (6)	FY 98 Action Plans (6)
Align for Success	Transparently share information	Communication Circuits
Build Strategic Commitment	Promote a common working environment	Office Automation & E-Mail Std
Serve the Army	Protect information	Install Firewalls
Satisfy the Customer	Satisfy internal/external customer info needs	Link to DPW's
Build the Team	Be cost-effective	Oversight of IT Costs & Acquisitions
Enhanced Capabilities	Plan for the future use of IT	Arch 2000
Reshape Culture		

Lay out the Infrastructure
Information Delivery

Today	FY98	1999-2000
Tech	**Tech**	**Tech**
■ Redundant T1 at 12 CONUS Hubs ■ Single T-1 to CONUS Districts	■ Backup 56 kbps Circuits ■ ISDN, dedicated circuit, or Frame Relay below District	■ T-3 ATM to 7 CONUS Division HQ ■ 2 T-1s to POD ■ Redundant T-1s to Districts
Capability	**Capability**	**Capability**
■ Div have redundant Circuits ■ Districts = Move data, E-mail	■ Redundancy to District level ■ All Corps of Engineers has access to CEAP	■ Redundancy Desktop VTC at Div ■ 5 Concurrent Desktop VTC at District
	Cost	**Cost**
	■ 56 kbps = 900K (Annual)	■ T-3 +2T-1s =1.7M ■ Redundant T-1s = 1.8M ■ Avg. = 60K/year

Lay out the Infrastructure
Information Delivery
Redundant Circuits at the District Level

Present

CEAP-IA

LRD — **NWD**
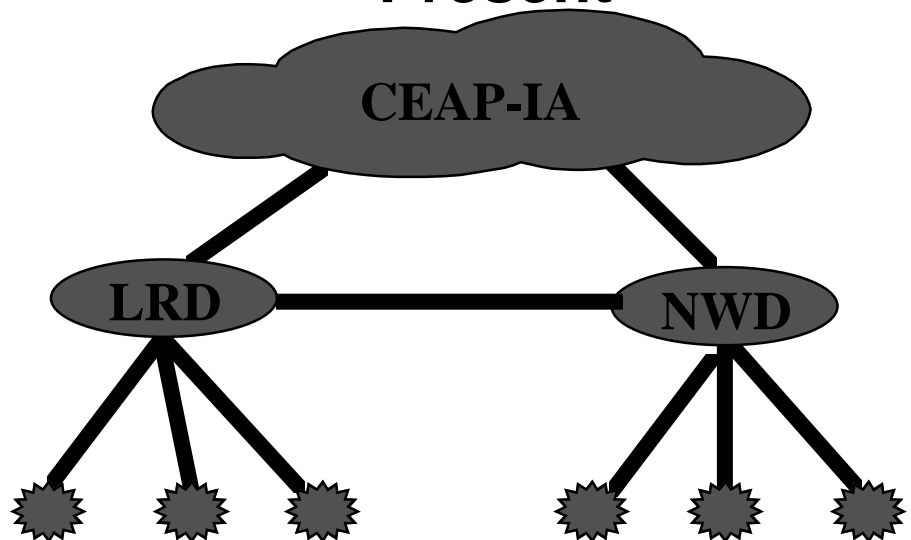
- **12 CONUS Divisions/Regions Connected with Redundant T1**
- **POD 256k Primary with 56 kbps backup**
- **CONUS Districts Connected via Single T1 Link**
- **POJ & TAE Single 256k; POF Single 128k**
- **Connectivity to Most Area and Resident Offices**
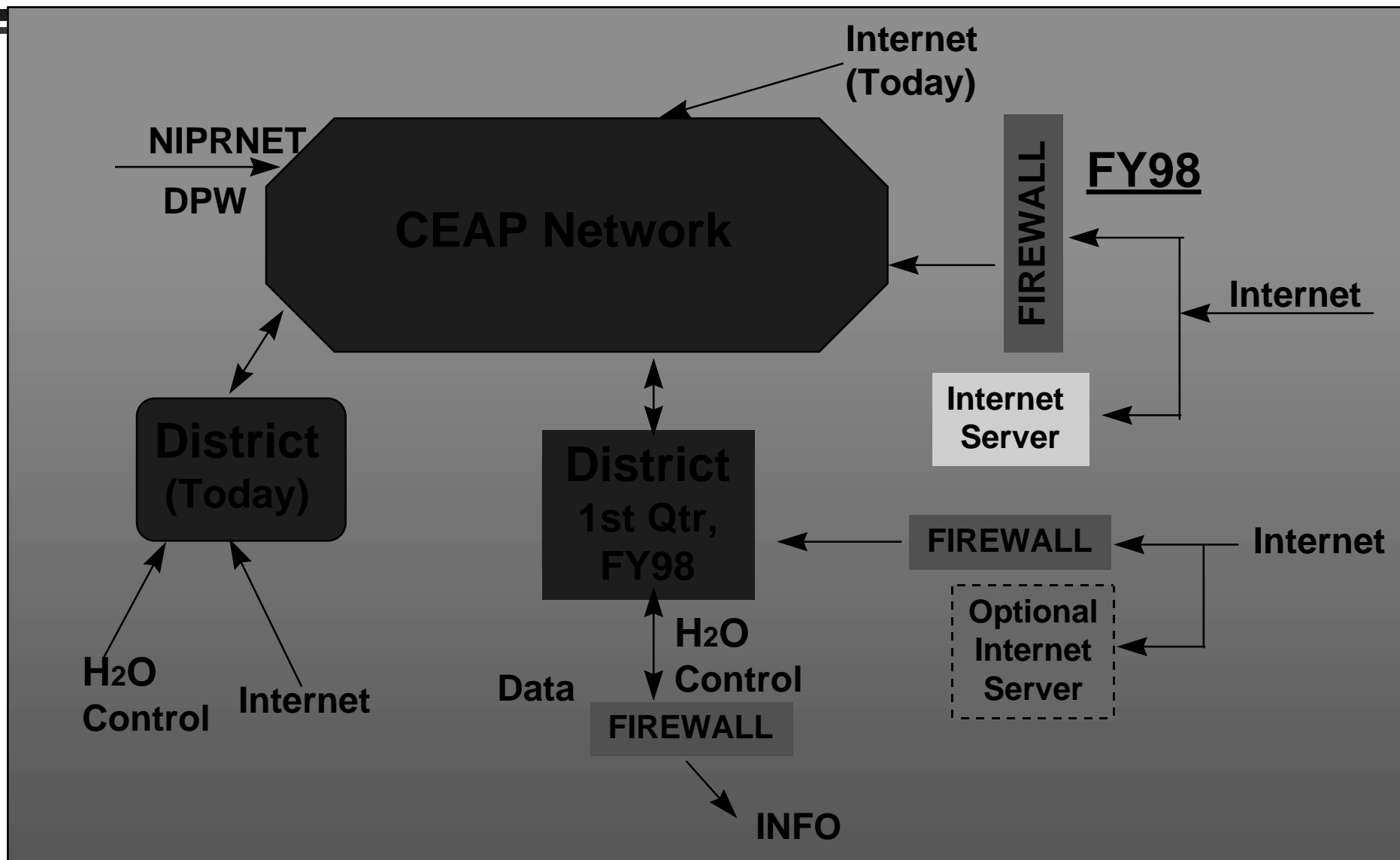
FY98

CEAP-IA

LRD — **NWD**
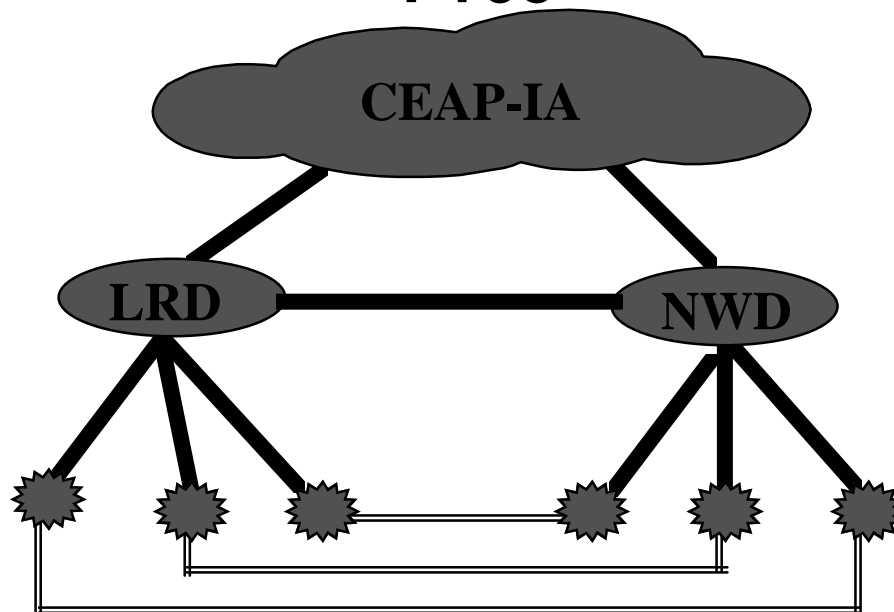
Enhancements

- **Backup 56 kbps Circuits Provided to all Districts $900,000**
- **Connectivity Provided to Remaining Area and Resident Offices Survey Required to Determine Cost**

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Enhanced Security & Protection
Firewalls

Internet (Today)

NIPRNET
DPW

CEAP Network

FIREWALL

FY98

Internet

Internet Server

District (Today)

District 1st Qtr, FY98

H_2O Control

Internet

H_2O Control

Data

FIREWALL

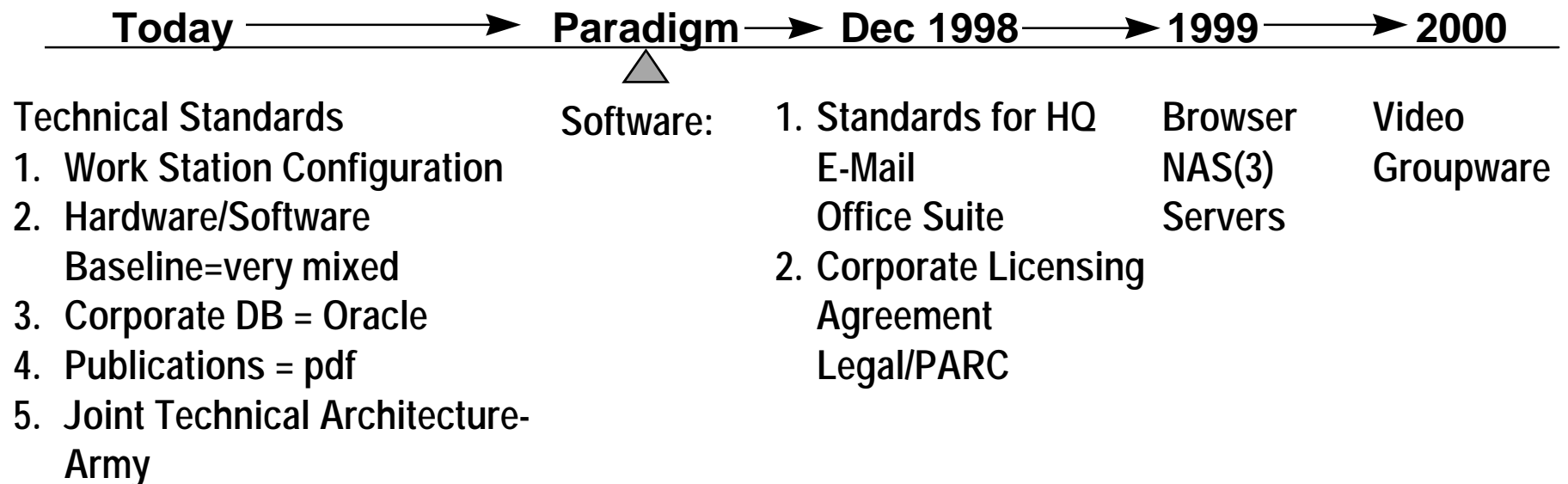FIREWALL

Internet

Optional Internet Server

Internet

INFO

H_2O Control

Standardize Software at the Desktop Level
Fully Integrated Business Process
Standardized E-mail & Office Automation Suite

Today ⟶ Paradigm ⟶ Dec 1998 ⟶ 1999 ⟶ 2000

Technical Standards

1. Work Station Configuration
2. Hardware/Software Baseline=very mixed
3. Corporate DB = Oracle
4. Publications = pdf
5. Joint Technical Architecture-Army

Software:

1. Standards for HQ
   E-Mail
   Office Suite
2. Corporate Licensing Agreement Legal/PARC

Browser
NAS(3)
Servers

Video
Groupware

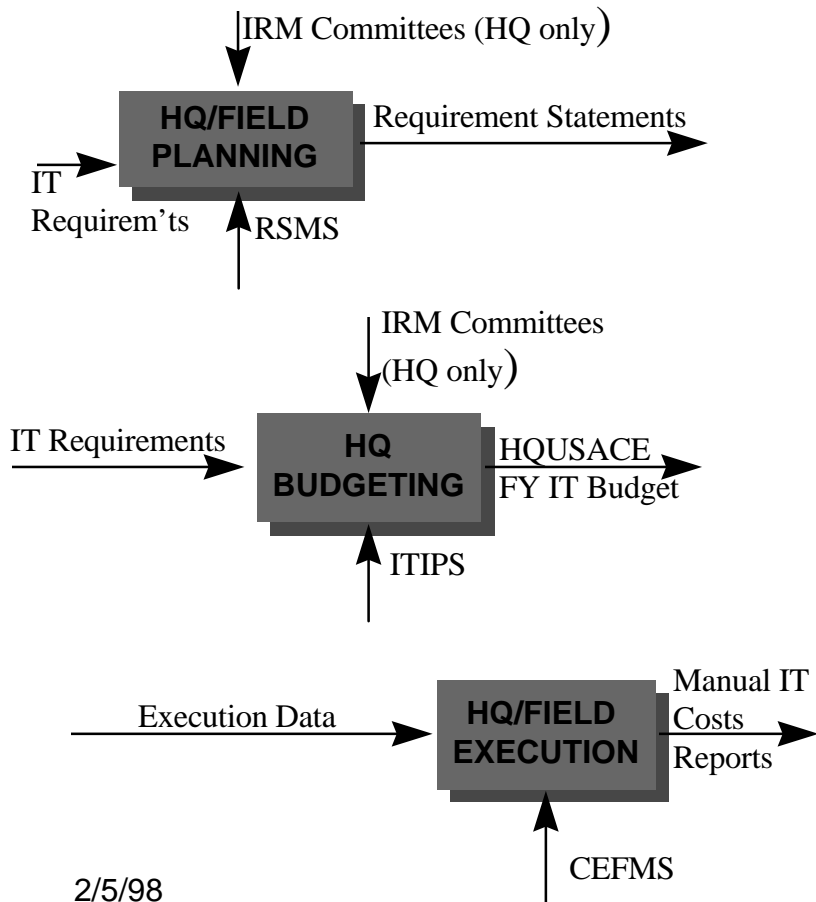Multiple Areas=Increase complexity & Increase Resistance to Change

The Corps of Engineers needs a plan to control cost
IM Develop a plan for tighter control to the desktop level
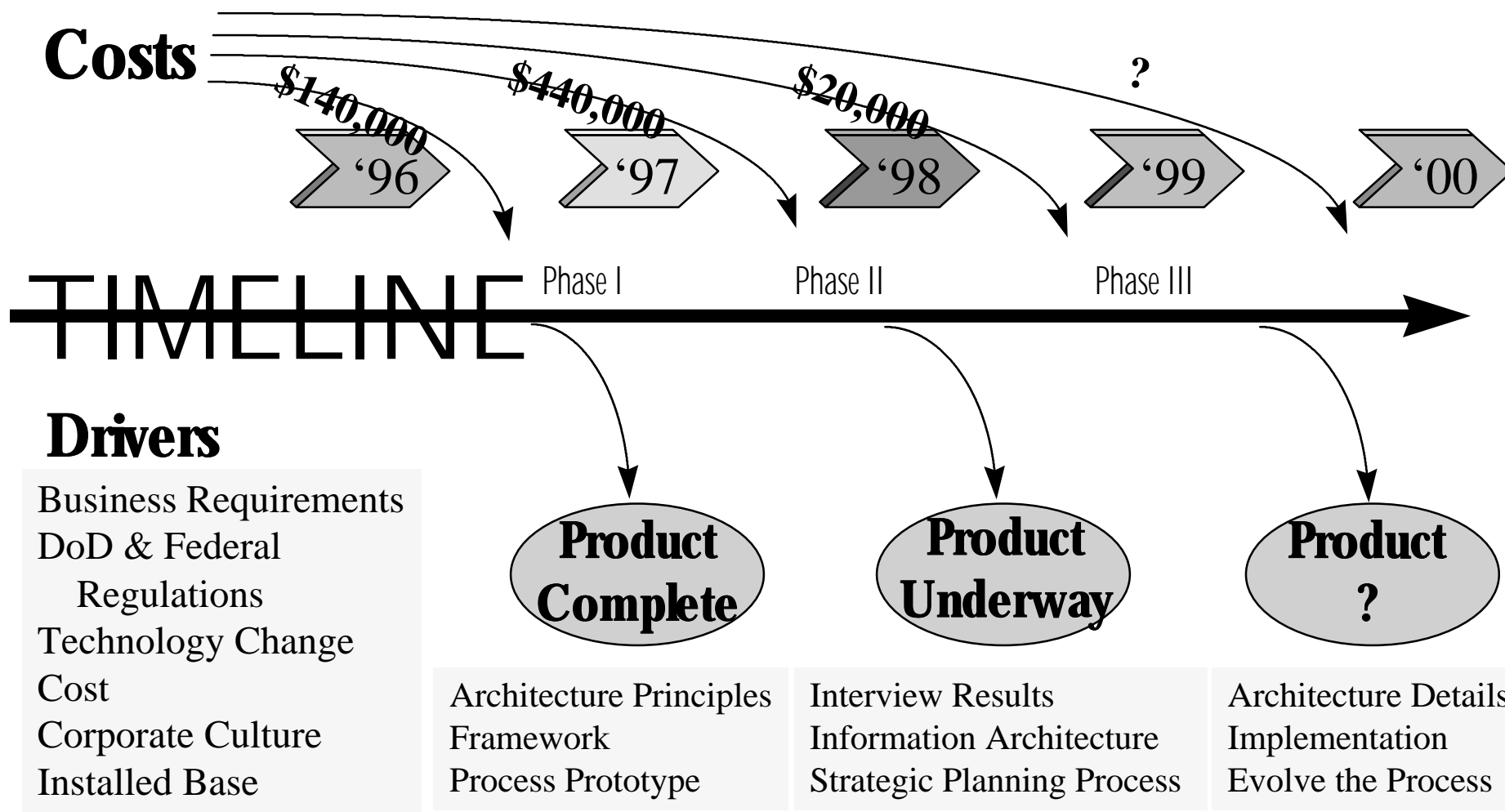# Reduce the Cost of Doing Business

CURRENT

IRM Committees (HQ only)

HQ/FIELD PLANNING → Requirement Statements

IT Requirem'ts →

RSMS

IRM Committees (HQ only)

IT Requirements → **HQ BUDGETING** → HQUSACE FY IT Budget

ITIPS

Execution Data → **HQ/FIELD EXECUTION** → Manual IT Costs Reports

CEFMS

FUTURE

IRM Committees (HQ/Field)

HQ/FIELD PLANNING → Require't Statem'ts

RSMS

IRM Committees (HQ/Field)

HQ/FIELD BUDGETING → HQUSACE Operating Budget / HQUSACE FY IT Budget

ITIPS

HQ/FIELD EXECUTION → Automated IT Cost Reports

CEFMS

Reshape the Culture
Architecture 2000+

Costs

$140,000 $440,000 $20,000   ?

'96   '97   '98   '99   '00

Phase I   Phase II   Phase III

TIMELINE

Drivers

Business Requirements
DoD & Federal
   Regulations
Technology Change
Cost
Corporate Culture
Installed Base

Product Complete

Product Underway

Product ?

Architecture Principles	Interview Results	Architecture Details
Framework	Information Architecture	Implementation
Process Prototype	Strategic Planning Process	Evolve the Process

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Customer Satisfaction
Enhance E-mail Capability at DPWs

Today

CEAP-IA

FY98

CEAP-IA

**Dial-In
1-800-no.**

Capabilities:
Mail Boxes for Those Without
File Transfer Capability
Internet Access
Web Services
DPW Home Pages
Web Browsing
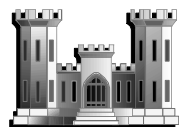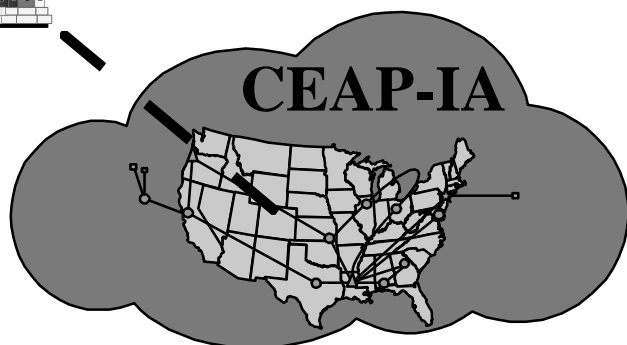
Estimated Annual Cost   **$500,000**
Estimated Completion   **30 Aug 98**

IT Capital Planning and Investment Concepts

3 Key Questions

1. Should the Corps be doing this work at all?

2. Can someone else (government agency or private sector) do the work better?

3. If not, is the work organized and being done the best way possible

IT Investment Decision Process

Evaluate

Select

Control
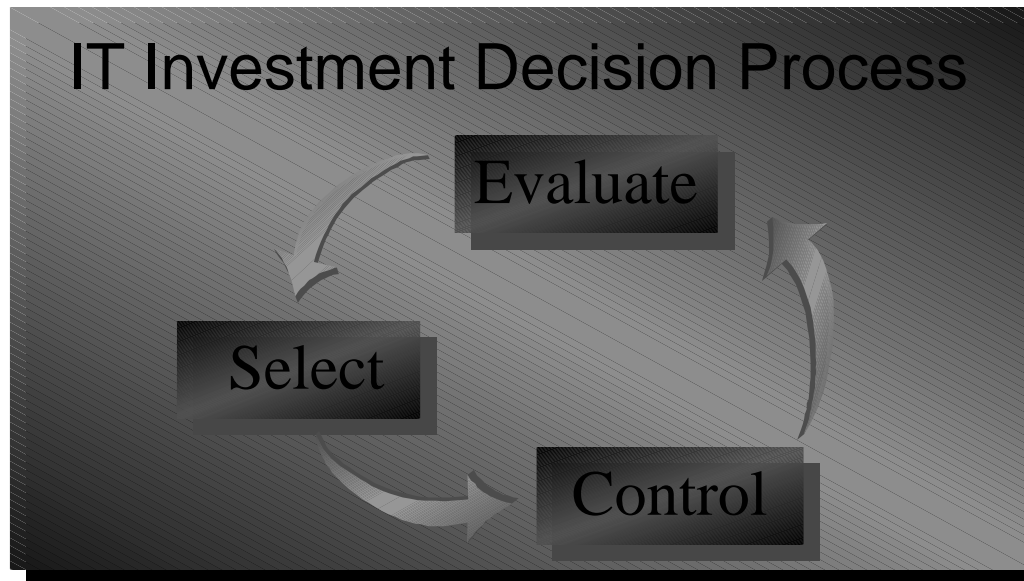
IT/IM Strategic Plan Benefits

"To achieve our Vision and get out in front of the changes required by technology and the future realities, we must strike out boldly... Success will come from a carefully sculpted, aggressive plan."

Lieutenant General Joe N. Ballard
Commander
U.S. Army Corps of Engineers

Conclusion

- **APPROVAL**

  » BOD Approval of IT/IM Strategic Plan

    – IT/IM Strategic Planning Process

    – Corporate IT Initiatives for CY 1998

    – IT Capital Planning and Investment Concepts

- **RELATED ISSUES**

  » Development of IT Acquisition Strategy
    - PARC Should Have Lead

  » HR Strategic Training Plan Must Address
    Corps-wide IT Skill Set Requirements